



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,769	04/10/2000	William J Beyda	OOP7572US	2711

7590

01/28/2004

Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

HOM, SHICK C

ART UNIT PAPER NUMBER

2666

DATE MAILED: 01/28/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/545,769

Applicant(s)

BEYDA ET AL.

Examiner

Shick C Hom

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/6/03 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the step of defining a quality of service using ToS bits at the IP layer (Layer3) for use in Ethernet (Layer 2), i.e., by the Ethernet switch based on the call rather than based on the sender as argued in page 7 lines 8-22) are not clearly recited in the rejected claims 1, 6, 11, 12, and 15. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2666

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371^o of this title before the invention thereof by the applicant for patent.

3. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-2, 6-7, 11, 12-13, and 15-16 are rejected under 35 U.S.C. 102(e) as being anticipate by Fijolek et al.

Regarding claims 1 and 6:

Fijolek et al. disclose the telecommunications system and device, comprising: an Ethernet-type local area network; and one or more telecommunications devices coupled to said Ethernet-type local area network (see col. 28 lines 1-43 which recite the Ethernet LAN coupling the telecommunications devices, e.g. cable modem CM and customer premise equipment CPE), said one or more

Art Unit: 2666

telecommunications devices including: an Internet Protocol voice communication stack (see col. 29 lines 35-58 which recite providing for voice over IP VoIP service clearly anticipate using the IP voice communication stack); a Quality of Service Ethernet layer (see col. 29 lines 28-34 which recite tag to request Quality of Service); and a Generate Quality of Service Ethernet layer interposed between said Internet Protocol voice communication stack and said Quality of Service Ethernet layer and adapted to intercept a second byte in an IP header (see col. 29 lines 4-15 which recite IP addresses being grouped into separate VLAN, i.e. a tag added at the header), identify from said second byte a quality of service required for individual calls, and generate corresponding Quality of Service commands to said Quality of Service Ethernet layer to define an Ethernet Quality of Service (see col. 30 lines 34-64, col. 33 lines 16-24, and col. 35 lines 66 to col. 36 line 13 which recite mapping QoS and/or ToS to service classes by the IP network or Ethernet and other mapping of existing IP and Ethernet LAN service class for a desired QoS).

Regarding claim 11:

Fijolek et al. disclose the method comprising intercepting a second byte from an Internet Protocol header (col. 29 lines 4-

Art Unit: 2666

15); identifying from said second byte a quality of service required for individual calls; and generating corresponding Quality of Service commands to a Quality of Service Ethernet layer to define an Ethernet Quality of Service (see col. 30 lines 34-64, col. 33 lines 16-24, and col. 35 lines 66 to col. 36 line 13 which recite mapping QoS and/or ToS to service classes by the IP network or Ethernet and other mapping of existing IP and Ethernet LAN service class for a desired QoS). Regarding claims 12 and 15:

Fijolek et al. disclose the method and system comprising beginning an IP multimedia call (col. 1 lines 24-34); encapsulating corresponding messages for said IP multimedia call in IP protocol data packets (col. 2 lines 8-67); setting a second byte of an IP header for said IP protocol data packets (col. 29 lines 4-34); reading said second byte before said IP protocol data packets are sent over a network; accessing a lookup table, said lookup table containing entries for mapping said second byte to QoS Ethernet quality of service commands (col. 3 line 55 to col. 5 line 5); sending said QoS Ethernet quality of service commands to a QoS Ethernet layer; and sending said IP protocol data packets over an Ethernet network using a quality of service as specified in said QoS Ethernet quality of

Art Unit: 2666

service commands (see col. 30 lines 34-64, col. 33 lines 16-24, and col. 35 lines 66 to col. 36 line 13 which recite mapping QoS and/or ToS to service classes by the IP network or Ethernet and other mapping of existing IP and Ethernet LAN service class for a desired QoS).

Regarding claims 2, 7, 13, and 16:

Fijolek et al. disclose the second byte comprising a Type of service byte (col. 3 line 1-38 and col. 29 lines 4-15).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a),

Art Unit: 2666

the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103[®] and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3, 8, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fijolek et al. in view of Schuster et al.

Fijolek et al. disclose the telecommunications system, device, method, and system described in paragraph 4 of this office action.

Fijolek et al. discloses all the subject matter of the claimed invention with the exception of the second byte comprising a Differentiated Service byte as in claims 3, 8, 14, and 17.

Schuster et al. teach that it is known to provide a packet differentiation schemes that allow packets to be tagged for

differentiated treatment, e. g., Internet Protocol Version Four (IPv4) specifies a Type of Service ToS byte in the header of an IP packet, which is used to differentiate packets having the format defined and as set forth at col. 7 lines 7 line 55 to col. 8 line 29 in the field of digital and multiplex communications for the purpose of providing a method for testing conformance to service level agreement in networks which clearly anticipate the second byte comprising a Differentiated Service byte as in claims 3, 8, 14, and 17.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the second byte comprising a Differentiated Service byte as taught by Schuster et al. to the method and system of network administration of Fijolek et al. because Schuster et al. teach the desirable advantage of testing conformance to service level agreement in networks and said testing conformance being desirable to achieve more efficient system operation in Fijolek et al.

7. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fijolek et al. in view of Bender et al.

Art Unit: 2666

Fijolek et al. disclose the telecommunications system, device, method, and system described in paragraph 4 of this office action.

Fijolek et al. discloses all the subject matter of the claimed invention with the exception of the Quality of Service Ethernet layer and the Generate Quality of Service Ethernet layer being modular as in claims 4 and 9.

Bender et al. teach that it is known to provide the layers and their protocols being designed in a modular manner such that each layer or protocol can be modified or updated without the need to modify the remaining layers or protocols as set forth at col. 6 lines 29-37 in the field of digital and multiplex communications for the purpose of being able to define and maintain the interfaces between the layers such that new functions can be easily supported and allows for isolated modification of a layer and its protocol(s) which clearly anticipate the Quality of Service Ethernet layer and the Generate Quality of Service Ethernet layer being modular as in claims 4 and 9.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Quality of Service Ethernet layer and the Generate Quality of

Art Unit: 2666

Service Ethernet layer being modular as taught by Bender et al. to the method and system of network administration of Fijolek et al. because Bender et al. teach the desirable advantage of providing the ability to define and maintain the interfaces between the layers such that new functions can be easily supported and which allows for isolated modification of a layer and its protocol(s) and said easily supported functions being desirable to achieve cost saving in system operation in Fijolek et al.

8. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fijolek et al. in view of Schuster et al. as applied to claims 1, 3, 6, and 8 above, and further in view of Bender et al.

Fijolek et al. in view of Schuster et al. disclose the telecommunications system, device, method, and system described in paragraphs 4 and 6 of this office action.

Fijolek et al. in view of Schuster et al. disclose all the subject matter of the claimed invention with the exception of the Quality of Service Ethernet layer and the Generate Quality of Service Ethernet layer being modular as in claims 5 and 10.

Bender et al. teach that it is known to provide the layers and their protocols being designed in a modular manner such that each layer or protocol can be modified or updated without the need to modify the remaining layers or protocols as set forth at col. 6 lines 29-37 in the field of digital and multiplex communications for the purpose of being able to define and maintain the interfaces between the layers such that new functions can be easily supported and allows for isolated modification of a layer and its protocol(s) which clearly anticipate the Quality of Service Ethernet layer and the Generate Quality of Service Ethernet layer being modular as in claims 5 and 10.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Quality of Service Ethernet layer and the Generate Quality of Service Ethernet layer being modular as taught by Bender et al. to the method and system of network administration of Fijolek et al. in view of Schuster et al. because Bender et al. teach the desirable advantage of providing the ability to define and maintain the interfaces between the layers such that new functions can be easily supported and which allows for isolated modification of a layer and its protocol(s) and said easily

Art Unit: 2666

supported functions being desirable to achieve cost saving in system operation in Fijolek et al. in view of Schuster et al.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Application/Control Number: 09/545,769
Art Unit: 2666

Page 12

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications;
please mark "EXPEDITED PROCEDURE")

Or:

(for informal or draft communications, please
label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal
Park II, 2121 Crystal Drive, Arlington. VA., Sixth
Floor (Receptionist).

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Shick Hom
whose telephone number is (703) 305-4742. The examiner's
regular work schedule is Monday to Friday from 8:00 am to 5:30
pm EST and out of office on alternate Friday.

If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Seema Rao, can be
reached at (703) 308-5463.

Application/Control Number: 09/545,769

Page 13

Art Unit: 2666

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



D. M. T.
DANGTON
PRIMARY EXAMINER

SH

January 15, 2004